

Handout
May 22, 2007
Heating

Thank you Chairman Montgomery and the assembled members off the committee. My name is Brian Nemoir, I am testifying in support of AB 229, and will try to be brief in my comments and will also supply a copy of my testimony to the committee members.

Prior to the mid-1970s, there were a number of examples of both public and private usages of heated surfaces designed to keep sidewalks, ramps, stairs, stoops, steps, entrance ways and driveways clear of winter's oft-despised byproduct, snow.

Back then, the heated surfaces used most-often where steam-driven, with some electrical applications. Previously-used systems where often unreliable, energy-consumptive and required manual operation. With the country in the throws of an energy crisis, and with limited applications statewide, banning the non-energy friendly heated surfaces was an easy sacrifice (101.124). At the time there were an estimated ten states instituting bans according the National Conference of State Legislators (NCSL). Our prohibition did include a couple of exceptions, specifically hospitals and senior homes/assisted living facilities, where continued usage is fairly common and within the past ten years has delivered positive results.

Current:

Technological advancement with both steam and electrical products has silenced the major complaint prompting the mid-70s prohibition, excessive energy consumption. Current products—whether they be steam-drive or electrical—run with far-greater efficiency, utilizing automated timers/weather sensors which monitor both temperature and moisture regulating usage based on need.

Steam products, requiring a boiler system, have employed chemicals like glycol which is an alcohol-based solvent to prevent freeze-ups, and easier energy transfer making for a more efficient system.

Electrical products have made many positive advances. Previously high-voltage products with unnecessary long runtimes were the only option. Currently, when considering an electrical heated surface product, low voltage options are the industry standard. On average, low voltage options run 3-6 hours per storm, and for an average driveway (estimated at 600 sq ft) cost somewhere around \$8-12 (35w system @ .09 Kilowatts-per hour) to keep thawed/clean. Heated surface operational costs are similar if not less than a snow removal service and don't produce the CO₂ ozone emissions of snow removal equipment.

In addition, the electrical consumption needed to run such a heated surface product draw during a time in which electrical consumption is in lower demand (compared to the electricity-reliant summer months).

Many health care providers and senior centers already legally utilize heated surface, and have affirmed the many benefits, including:

- **Increased Safety**—Greater safety means less chance of an accident, which lowers exposure to litigation.
- **Reduced Interior Wear-n-Tear**—By not tracking in snow, salt and water, abuse on interior environments is minimized.
- **Less Environmental Harm**—Eliminating the need for salt or other snow melt chemicals is easier on the immediate environment (grass, trees, decorative plantings) as well as the sub-surface environment. In addition, heated surfaces don't contribute CO₂ emissions as do the heavy and light machinery used by professional snow removal crews.

It's worth noting the environmental harm sodium chloride, the most commonly-used road salt mixture, has on the greater environment. Not only are communities like Waukesha seeing the sodium levels within the shallow aquifer rise, but the impact on lakes around urban areas is very real and of grave concern and not merely the anthem of environmental activists. Specifically, a 2004-05 Road Salt report issued by the City of Madison, points to the deleterious impact the continued use of road salt has had on its Lakes and various watersheds and wells. In 1972, the City of Madison mandated a 50% reduction in current salt usage. Since, with a minimal increase in road surfaces, Madison road salt usage has increased 48%. Clearly, the ban has proven ineffectual, and the impending results are shocking. Briefly, two key facts worth noting:

- Since 1975, chloride in well no. 6 has increased 246%, Chloride in well no. 10 has increased 551% and well no 17 has increased 282%. Sodium has also increase, although not at similar levels
- In 2003-04, stormwater runoff discharging directly into Spring Harbor/Lake Mendota contained chloride at 36,000 mg/L, which translates to a concentration 69% higher than salt in seawater

Such concerning environmental trends are occurring at a time in which precipitation during the winter months (snow is measure by precipitation) is down, and temperatures are up nearly 5 degrees on average...speaking to milder winters, and as demonstrated by salt usage a continued public addiction to salted roads.

Admittedly, heated roads aren't a realistic alternative, but allowing individuals and businesses the option of a safe, efficient and enviornmentally cooperative heated surfaces is a realistic option.

I close by noting one last change since the heated surface prohibition was put in place over twenty years ago...according to the National Conference of State

Legislators, Wisconsin remains the only state prohibiting heated surfaces.
Additional industry research affirms such findings.

I ask for your support of AB 229 and its companion bill SB 128.

If there are additional questions or comments, I am more than willing to try to answer.

Thank you.

Raschka, Adam

From: Tony Lehmann [tplehmann@mail.ci.wausau.wi.us]
Sent: Monday, May 21, 2007 3:35 PM
To: Raschka, Adam
Subject: Heated pedestrian pavement

Rep. Phil Montgomery

Room 129 West
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Representative Montgomery;

I am the City Engineer for the City of Wausau. I am very interested in the upcoming hearing regarding the use of heated pavements in Wisconsin.

The City of Wausau, in association with Marathon County, is looking at the installation of an outside stairway between two levels of parking associated with our County public library. Due to the northern exposure of the sidewalk and the heavy use anticipated, we would very much like to be able to construct the stairway using heated concrete pavement. It is my understanding that current law in Wisconsin precludes the use of such pavement. We feel the use of a heated pavement in this situation, as well as other similar conditions would not only be a net energy savings measure due to the minimized maintenance needed, but it would enhance public safety since modern deicing systems using heated pavement are automated.

Thank you

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